Practice: 332 - Contour Buffer Strips

Scenario: #1 - Introduced Grass

Scenario Description:

Narrow strips of permanent, herbaceous vegetative cover established around the hill slope and alternated down the slope with wider cropped strips in between that are farmed on the contour. This practice applies to all conventional cropland. Practice includes seedbed prep and planting of introduced species (scenario includes non-native grass/legume species) and foregone income for the area of the buffer strip that is taken out of production.

Before Situation:

Water Erosion Calculator (e.g. RUSLE2) indicates that there is a significant amount of sheet and rill erosion and/or a significant amount of sediment potenially delivered to the downslope edge of the field. A secondary concern is that there may not be enough wildlife/pollinator habitat, food source or refugia in the field or farm.

After Situation:

introduced grasses, legumes and forbs will be established in strips in the field to meet the resource needs and producer objectives. Minimum widths shall be based on NRCS local design criteria specific to the purpose for installing the practice. Introduced species shall be selected that do not function as a host for diseases of a field crop and have physical charactaristics necessary to control water erosion to tolerable levels in the cropped area of the field.

Scenario Feature Measure: number of acres

Scenario Unit: Acre

Scenario Typical Size: 1

Scenario Cost: $497.83 **Scenario Cost/Unit:** $497.83

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price ($/unit)	Quantity	Cost
Equipment/Installation						
Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	$5.88	1	$5.88
Fertilizer, ground application, dry bulk	950	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	$6.50	1	$6.50
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	$20.46	1	$20.46
Foregone Income						
FI, Hay, General Grass	2122	General Grass Hay is Primary Land Use	Ton	$41.00	-2	($82.00)
FI, Corn Dryland	1959	Dryland Corn is Primary Crop	Acre	$432.87	0.5	$216.44
FI, Soybeans Dryland	1961	Dryland Soybeans is Primary Crop	Acre	$426.49	0.5	$213.25
Materials						
Herbicide, Glyphosate	334	A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	$15.83	1	$15.83
Four Species Mix, Cool Season, Introduced Perennial (2 grasses, 2 legumes)	2317	Cool season grass and legume mix. Includes material and shipping only.	Acre	$46.18	1	$46.18
Potassium, K2O	74	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	$0.27	40	$10.80
Phosphorus, P2O5	73	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	$0.30	50	$15.00
Nitrogen (N), Urea	71	Price per pound of N supplied by Urea. Price is not per pound of total product applied, no conversion is needed.	Pound	$0.59	50	$29.50

Practice: 332 - Contour Buffer Strips

Scenario: #2 - Native Grass

Scenario Description:

Narrow strips of permanent, herbaceous vegetative cover established around the hill slope and alternated down the slope with wider cropped strips in between that are farmed on the contour. This practice applies to all conventional cropland. Practice includes seedbed prep and planting of native species (scenario includes native grass/legume/forbs species) and foregone income for the area of the buffer strip that is taken out of production.

Before Situation:

Water Erosion Calculator (e.g. RUSLE2) indicates that there is a significant amount of sheet and rill erosion and/or a significant amount of sediment potenially delivered to the downslope edge of the field. A secondary concern is that there may not be enough wildlife/pollinator habitat, food source or refugia in the field or farm.

After Situation:

Native grasses and legumes/forbs will be established in strips in the field to meet the resource needs and producer objectives. Minimum widths shall be based on NRCS local design criteria specific to the purpose for installing the practice. Native species shall be selected that do not function as a host for diseases of a field crop and have physical charactaristics necessary to control water erosion to tolerable levels in the cropped area of the field.

Scenario Feature Measure: Number of acres

Scenario Unit: Acre

Scenario Typical Size: 1

Scenario Cost: $699.12 **Scenario Cost/Unit:** $699.12

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price ($/unit)	Quantity	Cost
Equipment/Installation						
Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	$5.88	2	$11.76
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	$20.46	1	$20.46
Foregone Income						
FI, Corn Dryland	1959	Dryland Corn is Primary Crop	Acre	$432.87	0.5	$216.44
FI, Soybeans Dryland	1961	Dryland Soybeans is Primary Crop	Acre	$426.49	0.5	$213.25
Materials						
Herbicide, Glyphosate	334	A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	$15.83	2	$31.66
Three plus Species Mix, Warm Season, Native Perennial	2327	Native, warm season perennial grass. Includes material and shipping only.	Acre	$205.56	1	$205.56

Practice: 332 - Contour Buffer Strips

Scenario: #3 - Introduced Grass, Organic

Scenario Description:

Narrow strips of permanent, herbaceous vegetative cover established around the hill slope and alternated down the slope with wider cropped strips in between that are farmed on the contour. This practice applies to all organic cropland. Practice includes seedbed prep and planting of introduced species (scenario includes non-native grass/legume species) and foregone income for the area of the buffer strip that is taken out of production.

Before Situation:

Water Erosion Calculator (e.g. RUSLE2) indicates that there is a significant amount of sheet and rill erosion and/or a significant amount of sediment potenially delivered to the downslope edge of the field. A secondary concern is that there may not be enough wildlife/pollinator habitat, food source or refugia in the field or farm.

After Situation:

introduced grasses, legumes and forbs will be established in strips in the field to meet the resource needs and producer objectives. Minimum widths shall be based on NRCS local design criteria specific to the purpose for installing the practice. Introduced species shall be selected that do not function as a host for diseases of a field crop and have physical charactaristics necessary to control water erosion to tolerable levels in the cropped area of the field.

Scenario Feature Measure: Number of acres

Scenario Unit: Acre

Scenario Typical Size: 1

Scenario Cost: $551.00 **Scenario Cost/Unit:** $551.00

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price ($/unit)	Quantity	Cost
Equipment/Installation						
Tillage, Light	945	Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.	Acre	$10.67	2	$21.34
Fertilizer, ground application, dry bulk	950	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	$6.50	1	$6.50
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	$20.46	1	$20.46
Foregone Income						
FI, Hay, General Grass, Organic	2200	Organic general Grass Hay is Primary Land Use	Ton	$47.00	-2	($94.00)
FI, Organic, Corn Dryland	2232	Organic Dryland Corn is Primary Crop	Acre	$497.80	0.5	$248.90
FI, Organic, Soybeans Dryland	2234	Organic Dryland Soybeans is Primary Crop	Acre	$490.46	0.5	$245.23
Materials						
Certified Organic, Three Species Mix, Cool Season, Perennial Grasses and Legumes	2340	Certified organic cool season perennial grass and legume mix. Includes material and shipping only.	Acre	$64.77	1	$64.77
Potassium, Organic	268	ORGANIC Potassium	Pound	$0.27	40	$10.80
Phosphorus, Organic	267	ORGANIC Phosphorus	Pound	$0.27	50	$13.50
Nitrogen, Organic	266	ORGANIC Nitrogen	Pound	$0.27	50	$13.50

Practice: 332 - Contour Buffer Strips

Scenario: #4 - Native Grass, Organic

Scenario Description:

Narrow strips of permanent, herbaceous vegetative cover established around the hill slope and alternated down the slope with wider cropped strips in between that are farmed on the contour. This practice applies to all organic cropland. Practice includes seedbed prep and planting of native species (scenario includes native grass/legume/forbs species) and foregone income for the area of the buffer strip that is taken out of production.

Before Situation:

Water Erosion Calculator (e.g. RUSLE2) indicates that there is a significant amount of sheet and rill erosion and/or a significant amount of sediment potenially delivered to the downslope edge of the field. A secondary concern is that there may not be enough wildlife/pollinator habitat, food source or refugia in the field or farm.

After Situation:

Native grasses and legumes/forbs will be established in strips in the field to meet the resource needs and producer objectives. Minimum widths shall be based on NRCS local design criteria specific to the purpose for installing the practice. Native species shall be selected that do not function as a host for diseases of a field crop and have physical charactaristics necessary to control water erosion to tolerable levels in the cropped area of the field.

Scenario Feature Measure: Number of Acres

Scenario Unit: Acre

Scenario Typical Size: 1

Scenario Cost: $607.79 **Scenario Cost/Unit:** $607.79

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price ($/unit)	Quantity	Cost
Equipment/Installation						
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	$20.46	1	$20.46
Tillage, Light	945	Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.	Acre	$10.67	2	$21.34
Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	$5.88	1	$5.88
Foregone Income						
FI, Organic, Corn Dryland	2232	Organic Dryland Corn is Primary Crop	Acre	$497.80	0.5	$248.90
FI, Organic, Soybeans Dryland	2234	Organic Dryland Soybeans is Primary Crop	Acre	$490.46	0.5	$245.23
Materials						
One Species, Warm Season, Native Perennial Grass	2322	Native, warm season perennial grass. Includes material and shipping only.	Acre	$65.98	1	$65.98

Practice: 332 - Contour Buffer Strips

Scenario: #5 - Pollinator Habitat

Scenario Description:

Narrow strips of permanent, herbaceous vegetative cover including mix of grasses, legumes and/or forbs that provides a mix of early, mid, and late season blooming forbs for pollinator habitat. Established around the hill slope and alternated down the slope with wider cropped strips in between that are farmed on the contour. This practice applies to all conventional cropland. Practice includes seedbed prep and planting of pollinator species. The area of the buffer strip is taken out of production.

Before Situation:

Water Erosion Calculator (e.g. RUSLE2) indicates that there is a significant amount of sheet and rill erosion and/or a significant amount of sediment potenially delivered to the downslope edge of the field. A secondary concern is that there may not be enough wildlife/pollinator habitat, food source or refugia in the field or farm.

After Situation:

Native grasses, legumes and forbs providing pollinator habitat will be established in strips in the field to meet the resource needs and producer objectives. Minimum widths shall be based on NRCS local design criteria specific to the purpose for installing the practice. Native species shall be selected that do not function as a host for diseases of a field crop and have physical charactaristics necessary to control water erosion to tolerable levels in the cropped area of the field.

Scenario Feature Measure: number of acres

Scenario Unit: Acre

Scenario Typical Size: 1

Scenario Cost: $744.96 **Scenario Cost/Unit:** $744.96

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price ($/unit)	Quantity	Cost
Equipment/Installation						
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	$20.46	1	$20.46
Foregone Income						
FI, Corn Dryland	1959	Dryland Corn is Primary Crop	Acre	$432.87	0.5	$216.44
FI, Soybeans Dryland	1961	Dryland Soybeans is Primary Crop	Acre	$426.49	0.5	$213.25
Materials						
Herbicide, Glyphosate	334	A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	$15.83	2	$31.66
Untreated Conventional Seed, Three plus Species Mix, Warm Season Perennial Grass	2344	Untreated conventional wWarm season perennial grass mix. May contain seed that are not available as certified organic. Includes material and shipping only.	Acre	$263.16	1	$263.16

Practice: 332 - Contour Buffer Strips

Scenario: #6 - Pollinator Habitat, Organic

Scenario Description:

Narrow strips of permanent, herbaceous vegetative cover including mix of grasses, legumes and/or forbs that provides a mix of early, mid, and late season blooming forbs for pollinator habitat. Established around the hill slope and alternated down the slope with wider cropped strips in between that are farmed on the contour. This practice applies to all organic cropland. Practice includes seedbed prep and planting of pollinator species. The area of the buffer strip is taken out of production.

Before Situation:

Water Erosion Calculator (e.g. RUSLE2) indicates that there is a significant amount of sheet and rill erosion and/or a significant amount of sediment potenially delivered to the downslope edge of the field. A secondary concern is that there may not be enough wildlife/pollinator habitat, food source or refugia in the field or farm.

After Situation:

Native grasses, legumes and forbs providing pollinator habitat will be established in strips in the field to meet the resource needs and producer objectives. Minimum widths shall be based on NRCS local design criteria specific to the purpose for installing the practice. Native species shall be selected that do not function as a host for diseases of a field crop and have physical charactaristics necessary to control water erosion to tolerable levels in the cropped area of the field.

Scenario Feature Measure: number of acres

Scenario Unit: Acre

Scenario Typical Size: 1

Scenario Cost: $799.09 **Scenario Cost/Unit:** $799.09

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price ($/unit)	Quantity	Cost
Equipment/Installation						
Tillage, Light	945	Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.	Acre	$10.67	2	$21.34
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	$20.46	1	$20.46
Foregone Income						
FI, Organic, Soybeans Dryland	2234	Organic Dryland Soybeans is Primary Crop	Acre	$490.46	0.5	$245.23
FI, Organic, Corn Dryland	2232	Organic Dryland Corn is Primary Crop	Acre	$497.80	0.5	$248.90
Materials						
Untreated Conventional Seed, Three plus Species Mix, Warm Season Perennial Grass	2344	Untreated conventional wWarm season perennial grass mix. May contain seed that are not available as certified organic. Includes material and shipping only.	Acre	$263.16	1	$263.16